Manitoba Agricultural Review 1991

Manitoba
Agriculture
Economics

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DATA SOURCES: *Agriculture Canada*
Farm Credit Corporation
Manitoba Agricultural Credit Corporation
Manitoba Agriculture
Manitoba Bureau of Statistics
Manitoba Hydro
Statistics Canada
Western Canada Fertilizer Association

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July 1992

MANITOBA AGRICULTURAL REVIEW

INTRODUCTION

The major focus of this publication is on primary agriculture. However, farming obviously cannot exist in isolation. It is an integral part of the total agriculture-food system which also includes manufacturing, processing, transportation, distribution and wholesale/retail trade. Agriculture makes an important contribution to Manitoba's overall economic activity, both in its production and consumption. Between 1987 and 1991, agriculture and related industries contributed an average of 11.5 percent to the provincial Gross Domestic Product. For every dollar of net farm income produced in Manitoba, $1.70 is generated in the overall Manitoba economy. In Manitoba, one job in eight depends on agricultural production. In addition to stimulating local employment, agriculture in Manitoba is directly responsible for thousands of jobs in other parts of Canada.

PRIMARY AGRICULTURE

LAND RESOURCE

Manitoba extends 1,225 kilometres (761 miles) from the U.S. border to the Northwest Territories. Its area is 67.6 million hectares (167 million acres). The total land area is 54.8 million hectares (135.5 million acres), of which 14.6 million hectares (36.2 million acres) or 26.7 percent have some agricultural potential. Over 9.6 million hectares (23.6 million acres) of this area are nonorganic soils; 5.5 million hectares (13.5 million acres) of these are suitable for sustained annual production of cultivated crops. Land use for agriculture in 1991 (both improved and unimproved land) totalled 7.7 million hectares (19.1 million acres), or over 50 percent of total lands with agricultural potential. In 1991, 4.8 million hectares (11.8 million acres) were seeded to crops, almost 0.3 million hectares (0.7 million acres) were summerfallowed and over 0.3 million hectares (0.8 million acres) were improved pasture lands. Almost 1.8 million hectares (4.3 million acres were unimproved lands used for pasture or hay.

Further opportunity to expand the agricultural land resource base through greater use of organic soil areas also exists. Approximately 5.1 million hectares (12.6 million acres) of organic soils are in the non-permafrost or fringe agricultural zone of Manitoba. Potentially 0.6 million hectares (1.5 million acres) of these soils could be used for grain or special crop production. Another 0.2 million hectares (0.5 million acres) of organic soils could be easily developed and brought into forage crop production. About 0.2 million hectares (0.5 million acres) of organic soils are currently under cultivation.

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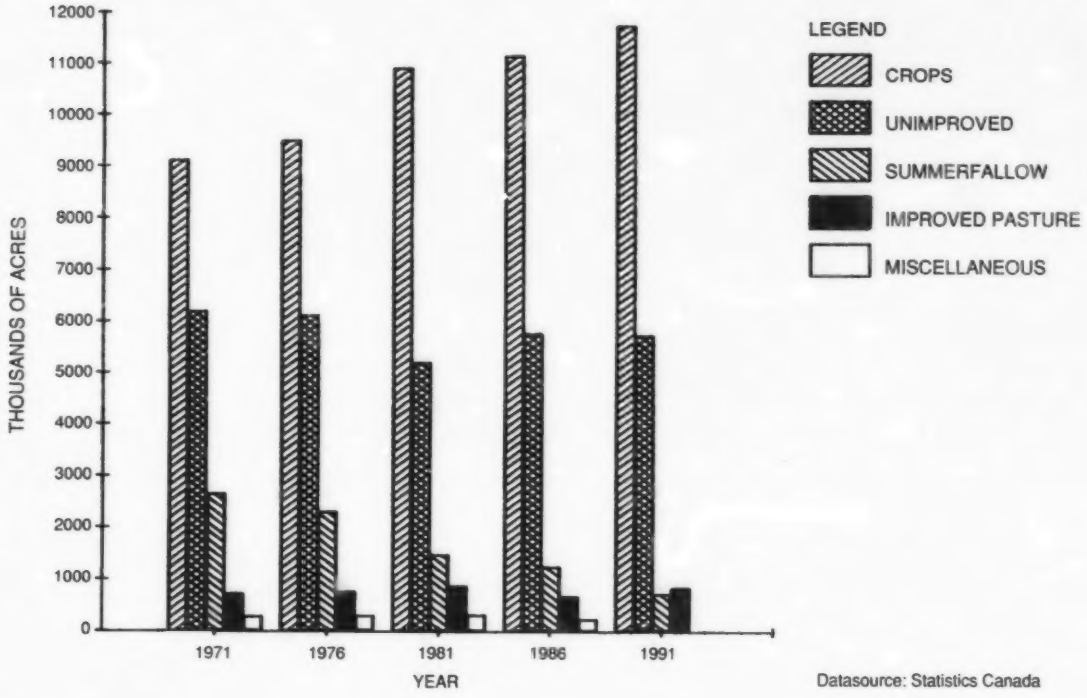
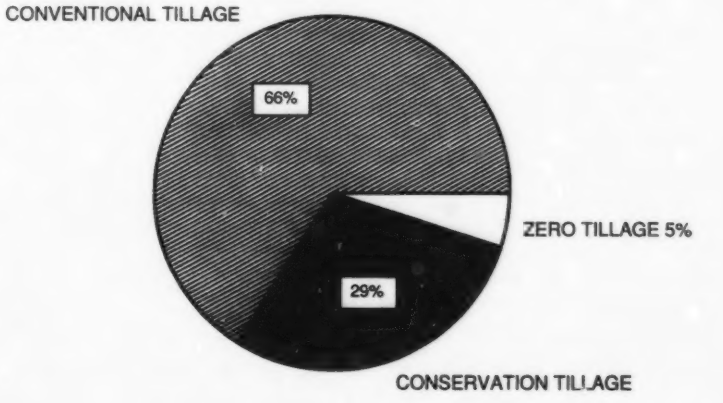
GRAPH 1 **Land Use 1971–1991**



Datasource: Statistics Canada

GRAPH 2 **Tillage Practices by Percent of Farm Area 1991**

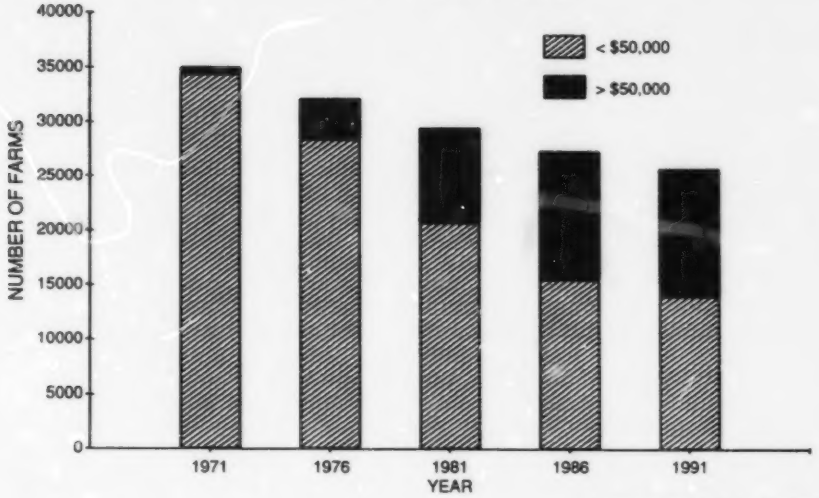


Datasource: Statistics Canada

GRAPH 3

Farms Classified by Farm Cash Receipts, 1971–1991

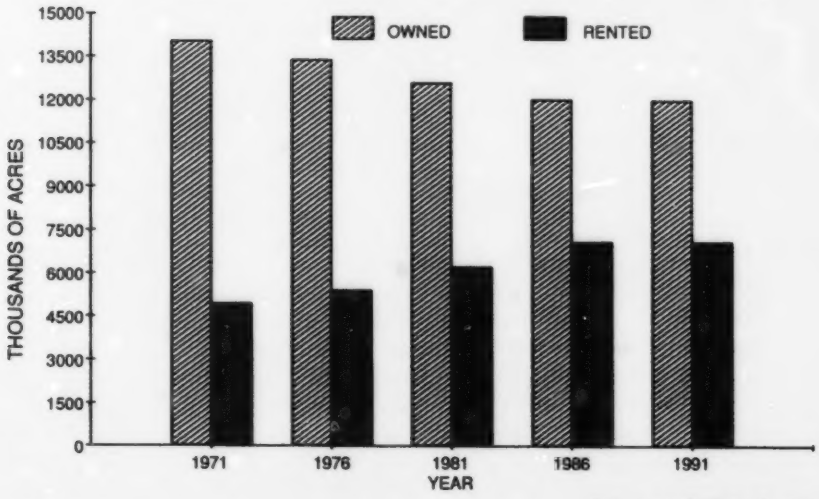
(Current Dollars)



Datasource: Statistics Canada

GRAPH 4

Tenure Status of Farmland 1971-1991



Datasource: Statistics Canada

FARMS AND FARMERS

In 1991, there were 25,706 farms in Manitoba, a decrease of six percent from 1986. Although the trend towards farm consolidation, which began in 1941, continued, the decline in farm numbers from 1986 to 1991 was the smallest in 40 years. Small farms, or those with annual sales under $50,000, contributed a large share of the decrease in farm numbers. The average size of Manitoba farms rose from 283 hectares (700 acres) in 1986 to 301 hectares (743 acres) five years later. Almost 63 percent of farmland was operator-owned while 37 percent was rented land. Family-operated farms accounted for 98.7 percent of farms in 1991, while non-family corporations represented 0.8 percent. During the 1986-1991 period, more farm families entered into partnerships or other operating arrangements than in previous years.

Three quarters of Manitoba farms were classified as either wheat, small grains or cattle farms in 1991. Wheat farms made up 27 percent of all farms with gross sales over $2,500, small grains farms comprised 26 percent, while cattle farms were 21 percent of the total.

The 1986 Census of Agriculture (most recent data) showed that 22 percent of farm operators were less than 35 years old, a decrease of three percentage points from the 1981 level. Eleven percent were 35 to 39, 33 percent were 40 to 54, and over 33 percent were 55 years and over. In 1981, 30 percent of farmers were over 55 years. The total farm population in 1986 was down 12 percent from the 1981 level. Approximately one Manitoban in 13 lived on a farm in 1986 compared with one in 10 in 1981.

The 1991 Census showed that 11,118 Manitoba farmers hired a total of 354,071 weeks of full-time and part-time labour. This represents a 3.3 percent increase in the number of weeks of hired labour since 1986, and an 8.4 percent decrease in the number of farms reporting hired labour. Over 79 percent of those hiring help did so on a part-time basis. In general, a shift away from year-round hired labour to more seasonal task-specific term employment is evident.

Most recent data show that in 1986, farm operators worked 1,536,485 days off the farm, a decrease of 4.3 percent from 1981. During this same period, although the number of farms where the operator reported off-farm employment decreased by 5.7 percent to total 9,714 in 1986, the proportion of all farms with the operator reporting off-farm work increased from 35.0 percent in 1981 to approximately 35.5 percent in 1986. Off-farm employment by Manitoba farmers is common and could continue to expand as labour requirements of the farm decline and as economic conditions pressure producers to find supplementary sources of income. Beginning farmers may also use this as an alternate way of entering full-time farming.

FARM INCOMES

Farmers have very little control over the prices they receive for most of the commodities they produce. Changing production costs, dependence on the weather and variable commodity prices have made farming a risky business. In recent years, government-assisted stabilization and insurance programs have helped stabilize farm incomes. Realized net farm income (cash flow) in Manitoba increased from $278 million in 1985 to $415 million in 1986 and $455 million in 1987, but decreased to $370 million in 1988, $319 million in 1989 and $158 million 1990. Preliminary projections indicate that with increased government assistance to producers, farmers will net $195 million in 1991, an increase of 23 percent from a year earlier.

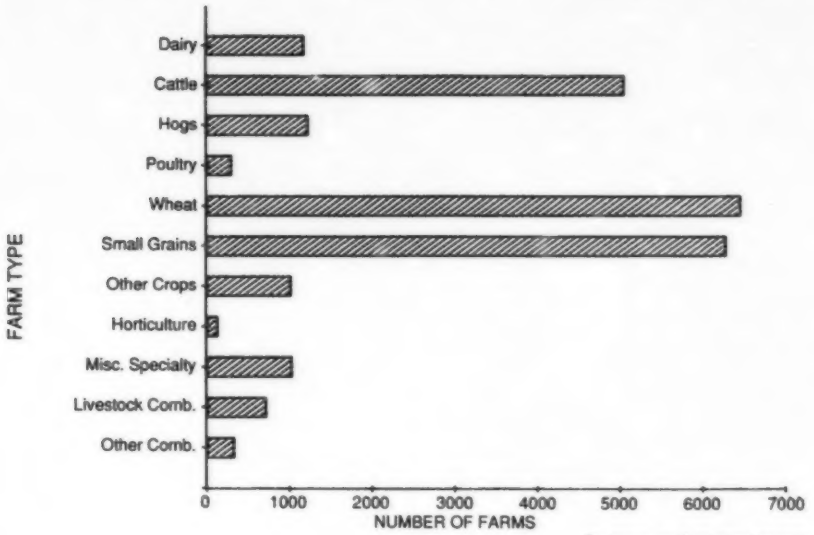
Total net income (net cash income adjusted for inventory change) per farm was $13,900 in 1981. This fell to $1,805 per farm in 1983 and peaked at $19,562 per farm in 1985 due to bumper crops and an inventory build-up. In 1986, total net income averaged $13,839 per farm, due in part to reduced on-farm inventories. Lower grain and oilseed receipts were offset by lower production costs and increased government payments to keep total net income at $14,050 per farm in 1987. Lower cash receipts, reduced on-farm inventories and higher operating expenses and depreciation resulted in a drop in net farm income to $5,610 per farm in 1988. The situation improved in 1989 when increased crop receipts and on-farm inventories more than offset higher operating expenses to raise total net farm income to $17,640 per farm. 1990 net income, at $18,610 per farm, was a result of significantly higher on-farm inventories compensating for reduced receipts and higher expenses. In 1991, the considerable drop in on-farm inventories was responsible for net income decreasing to $7,430 per farm.

FARM FINANCIAL DIFFICULTIES

According to the 1990 Farm Credit Corporation Survey results, some Manitoba farms continued to face serious financial difficulties, but most farms were in a relatively secure financial position. Despite a greater dependence on government program payments and off-farm employment, there was some improvement in the overall financial position of Manitoba farms between 1987 and 1991. The problems of farms in financial difficulty include excessive debt, weak commodity prices and low operating margins as well as inadequate resources and limited employment opportunities.

GRAPH 5

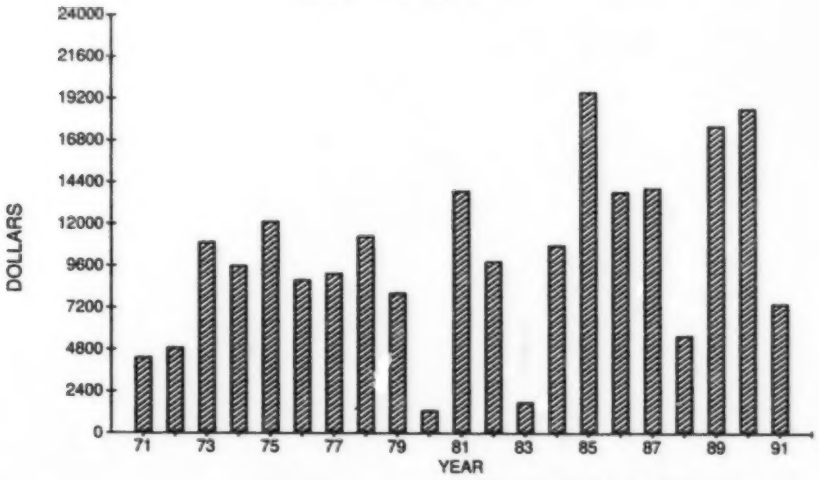
Farms Classified by Farm Type, 1991



Datasource: Statistics Canada

GRAPH 6

Total Net Income Per Farm 1971-1991



Datasource: Statistics Canada, Agriculture Canada

FARM EFFICIENCY

Improved productivity in all sectors of the food system has greatly increased food production and lowered food prices over the past 50 years. Much of this increased efficiency is due to farmers. Each Manitoba farm now feeds 250 people, five times as many as 50 years ago. In addition, food prices have not increased as much as wages in Manitoba, so a consumer only has to work half as long now as he or she did 50 years ago to buy Manitoba produced meat, milk, eggs, bread and vegetables. In 1991, Manitobans spent only one tenth of their disposable income in food stores.

CAPITAL INVESTMENT

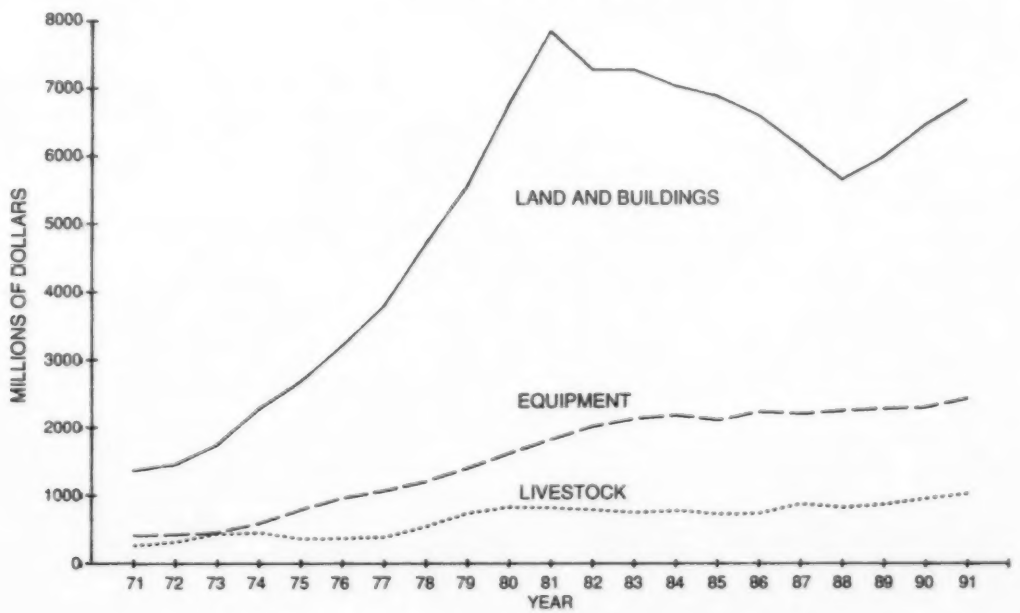
The total value of fixed capital used by Manitoba farmers in 1991 was almost $10.3 billion, or $399,010 per farm operation. This included over $6.8 billion (66.4 percent) for land and buildings, $2.4 billion (23.7 percent) for machinery and equipment and over $1.0 billion (9.9 percent) for livestock and poultry. Between 1981, when land values peaked, and 1988, the fixed capital investment in Manitoba agriculture decreased by over 17 percent. However, from 1989 to 1991, capital investment rose by almost 13 percent back to just below the 1981 level.

A noticeable shift has occurred in the distribution of capital investment. Land and buildings now account for 66.4 percent of total investment. This compares with 75 percent in 1981, and 69 percent in 1986 for the same components. The change in the contribution of land to total investment can be attributed to the escalation of land prices in the late 1970s because of increased investment in land, followed by a decrease in land values in the mid-1980s. In 1991, the average value of farm land and buildings in Manitoba was approximately $882 per hectare ($357 per acre), six percent above the 1990 level of $830 per hectare ($336 per acre). Between 1971 and 1981, capital investment in Manitoba agriculture more than doubled every five years. However, between 1981 and 1988, high real interest rates and low commodity prices reduced capital investment in farming. Farm machinery sales in the province also suffered during these years. Capital value has increased steadily since 1988.

In 1991, the ratio of Manitoba farm equity to assets was estimated at 0.81. By enterprise type, cash crop, dairy, hog and beef operations had equity to asset ratios of 0.85, 0.76, 0.76 and 0.86 respectively. Manitoba farmers had total assets estimated at $9.91 billion, liabilities of $1.86 billion and a net worth of $8.06 billion. Assuming farm sales are used as a proxy for farm size, then total liabilities as a percentage of total assets increased as farm size (total value of farm sales) increased. This percentage rose from a low of 9.0 percent for small farms (less than $26,500 farm sales) in 1990 to a high of 20.0 percent for larger farms (farm sales over $88,900).

GRAPH 7

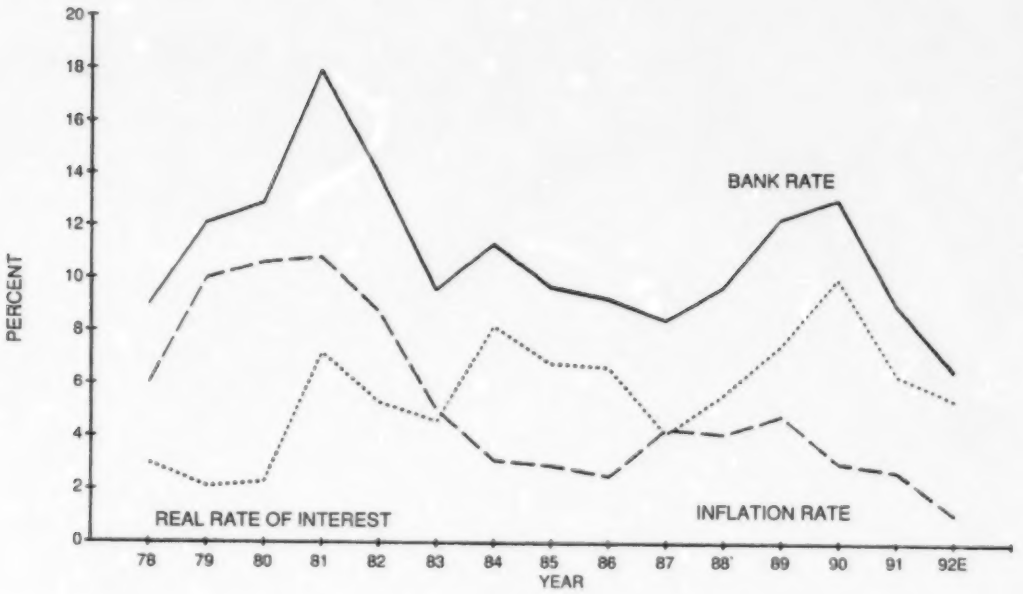
Capital Investment in Agriculture 1971-1991



Datasource: Statistics Canada

GRAPH 8

Bank Rate, Inflation Rate, Real Rate of Interest 1978-1992



Datasource: Bank of Canada Review

Chartered banks financed 32.1 percent of the total farm debt in Manitoba in 1991. The provincial and federal governments, through agencies such as MACC (Manitoba Agricultural Credit Corporation) and the FCC (Farm Credit Corporation), financed 11.6 and 14.4 percent of the provincial farm debt respectively, while government advanced payment programs accounted for 11.8 percent. Credit unions financed 16.5 percent of farm debt, while personal sources of credit, along with trust and insurance companies, amounted to 13.1 and 0.6 percent respectively.

Established farmers who own their land and have low debt-to-asset ratios have survived the recent poor economic situation. However, younger and beginning farmers, including those with low equity, face a more difficult financial situation. New farm operators often have limited finances to become established, and their low equity makes them a high risk to lending institutions. In many cases, MACC is the only source of financing for these higher-risk farmers. There were 367 farmers who had long-term loans totalling $24.2 million (other than for refinancing) approved by MACC for the fiscal year 1991-92. Of these, 96 percent were younger than 40 years.

Because of reduced farm incomes and the relatively high cost of borrowing in recent years, farmers with low equity faced a serious challenge to continuing their farming operations. Due to increased financial pressure, some farmers shifted their debt structure from short and intermediate-term to long-term to ease their repayment burdens. As farms become larger, operating debt financing becomes more important in their cost of operation.

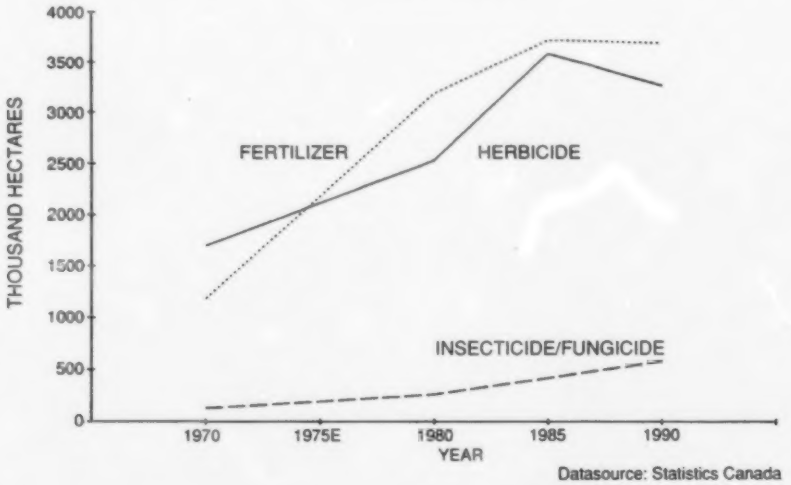
The interest paid on farm debt in 1991 was estimated at $152.4 million. This was down by 18.9 percent from 1990. Interest on debt as a percentage of total farm operating expenditure decreased from 17.1 percent in 1981 to 12.1 percent in 1990 and 10.0 percent in 1991. As interest still forms a significant percentage of total farm operating expenditures, it appears that a high equity position could be as important as operating efficiency to assure continued solvency.

OTHER AGRICULTURAL EXPENDITURES

Manitoba farmers have substantial operating expenditure requirements for such items as seed, feed, fertilizer and fuel. In 1986, total farm operating expenses (which included operating capital requirements and depreciation) were $1.67 billion. The 1991 total farm operating expense was $1.80 billion, down 1.4 percent from 1990 but eight percent higher than in 1986. It is estimated that 1992 total farm operating and depreciation expenses will increase to about $1.82 billion.

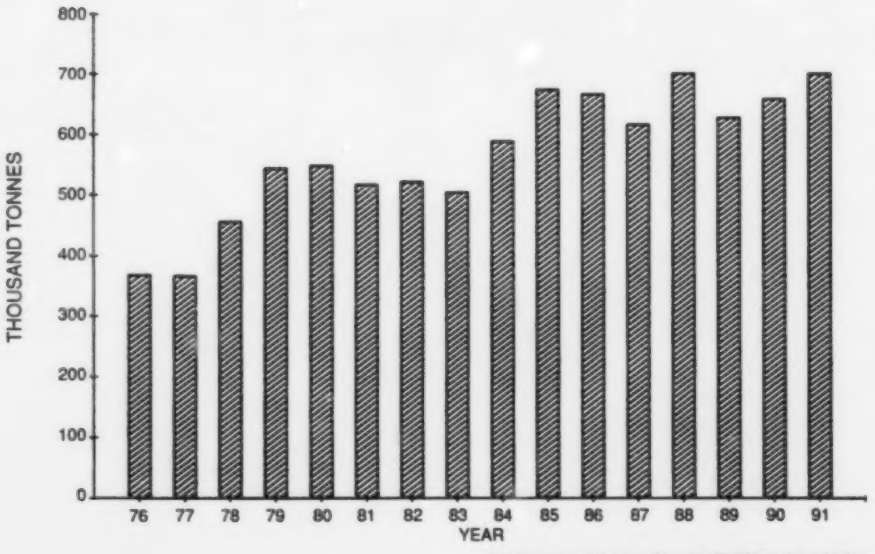
Fertilizer: The total volume of fertilizer sold went from 658 100 tonnes in 1990 to 700 500 tonnes in 1991. Total fertilizer expenditures in 1991 were estimated at $173.2 million, down by five percent from 1990. Manitoba farmers used five percent more fertilizer

GRAPH 9 **Fertilizer and Pesticide Use by Total Area 1970-1990**



Datasource: Statistics Canada

GRAPH 10 **Fertilizer Sales, 1976-1991**



Datasource: Western Canada Fertilizer Association

between 1986 and 1991, with fertilizer expenditures declining by 12.7 percent over the five-year period.

Pesticides: Total farm pesticide expenditures in 1991 were estimated at $117.7 million, an increase of one percent from 1990, and up by 10.9 percent from the 1986 level.

Fuel: The total farm expenditure for diesel, gasoline and lubricants in 1991 was $151.2 million, up by 6.9 percent from 1990. Farm fuel increased from 10.9 percent of total farm operating expenses in 1981 to peak at 13.1 percent in 1983, declined to 8.4 percent in 1989 but rose to 9.9 percent in 1991.

Repairs: In 1986, Manitoba farmers spent $130.8 million on equipment repairs. By 1991, expenditures were estimated at $158.3 million, a four percent increase from 1990.

Buildings: Farm expenditure for building repairs in 1991 was $34.1 million, three percent less than in 1990 and 28 percent above the 1986 level. Many farm buildings have been fully depreciated, but still remain serviceable.

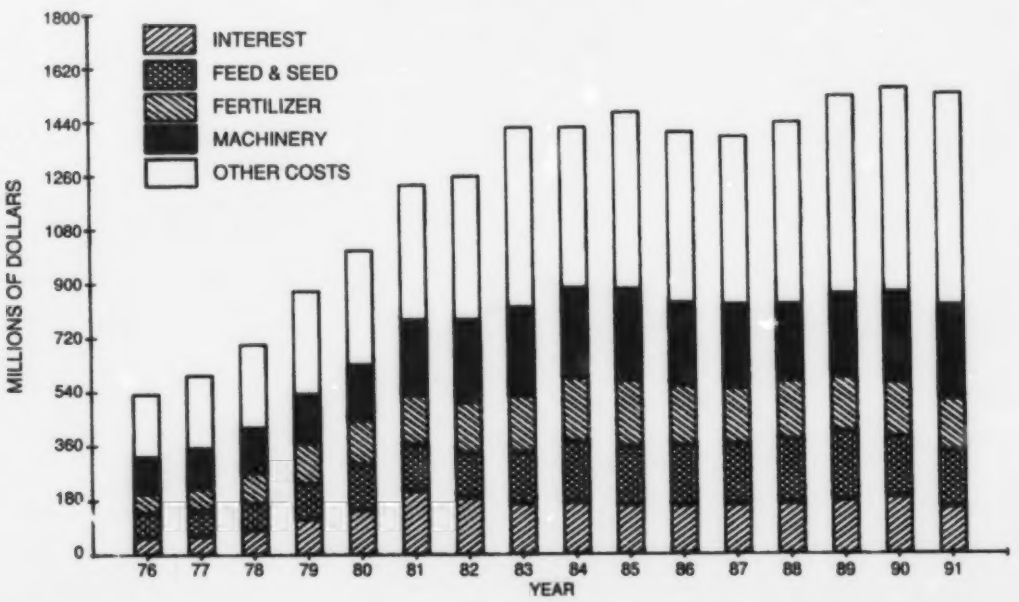
Livestock: Livestock expenditures by Manitoba farmers in 1991 were estimated at 181.0 million. This was down by 3.3 percent from 1990 expenditures due to lower feed costs offsetting higher costs for veterinary services and AI, and the purchase of livestock in 1991. In comparison, the total expenditure in 1986 was $183.7 million. Livestock expenses in 1991 represented 11.8 percent of operating expenditures compared with 12.1 percent in 1990.

Stabilization Premiums: The total premiums paid by farmers enrolled in government stabilization programs amounted to $63.3 million in 1991, almost double the 1990 level of $32.2 million. A large portion of the increase was due to the introduction of the Gross Revenue Insurance Plan (GRIP) in 1991.

Seed: In 1991, Manitoba farmers spent $45.6 million on seed compared with $47.4 million in 1986 and $48.1 million in 1990. Seed costs in 1991 and 1990 accounted for 3.0 and 3.1 percent of total expenditures respectively.

Other Expenditures: Other farm expenditures include taxes, wages, rentals, insurance, electricity, telephone, etc. Of the total $1.53 billion of net farm expenditures in 1991 (excluding depreciation), other expenditures amounted to $454.7 million or 29.7 percent of the total. The decrease of two percent from 1990 was mainly due to decreases in rent, and hail and business insurance premiums in 1991. In 1986, other expenditures accounted for $387.2 million, or 27.6 percent of the total.

GRAPH 11 Farm Cash and Other Expenses, 1976-1991



Datasource: Statistics Canada

AGRICULTURAL PRODUCTION

Manitoba's farm cash receipts were estimated at $1.98 billion in 1991, a 0.6 percent increase from the previous year. Over 50.7 percent of these receipts were derived from crop production, while 37.7 percent came from livestock production, including the production of honey, fur, forestry products and P.M.U. operations. The remaining 11.6 percent came from Gross Revenue Insurance Plan and Crop Insurance payments, Tripartite Stabilization payments, Western Grain Stabilization payments and supplementary payments. The Gross Revenue Insurance Plan was introduced in 1991 to help offset the effects of current low world grain prices caused by U.S. and EEC subsidized grain exports.

Crops

Although southern Manitoba has the climate and soil to grow a wide range of crops, the traditional **grain crops** of **wheat** and **barley** occupied over 57 percent of the 4.8 million hectares of cropped area in the province in 1991. Together, these two crops contributed about 40 percent of total farm cash receipts in the early 1980s. However, low grain prices caused this contribution to decline to one third in 1985 and 1986 and less than one quarter in 1987, 1988 and 1989. Greatly improved crop yields in 1990 and increased sales in 1991 raised the contribution to a third in these years. Wheat production decreased to 4.8 million tonnes in 1991, down by 18 percent from 1990, while barley production declined by 27 percent to 1.4 million tonnes.

Manitoba produces other grain crops, such as **oats, rye** and **mixed grains**. These crops occupied 216 180 hectares in 1991, a decrease of 27 percent from 1990.

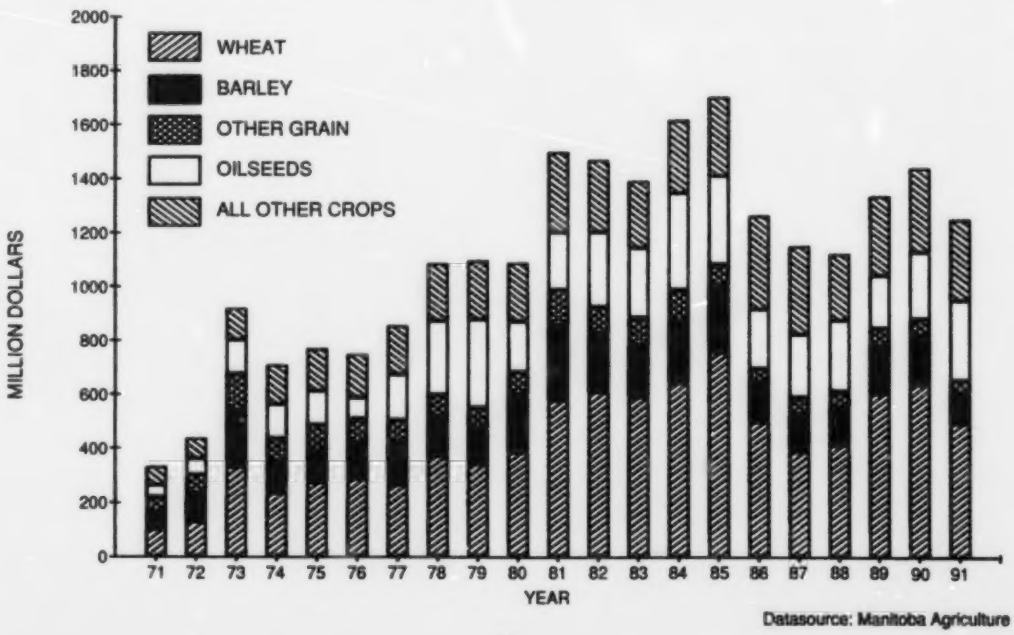
Flaxseed has been a relatively important crop since the 1940s, but other **oilseed crops**, such as canola and sunflowers have gained prominence since the early 1970s. The province produced 52 percent of Canada's flaxseed, 92 percent of the national sunflowerseed crop and 19 percent of the canola crop in 1991.

The area planted to **flaxseed** decreased by 23 percent to 250 000 hectares in 1991, while the flaxseed crop declined to 330 000 tonnes, down by 13 percent from the 1990 crop.

Canola production peaked at 635 000 tonnes in 1985, but a record area, 627 000 hectares, was planted to canola in 1988. As a result of improving prices, the seeded area increased by 32 percent from 1990 to 507 800 hectares in 1991, and production rose by 73 percent from the 1990 level to 796 000 tonnes.

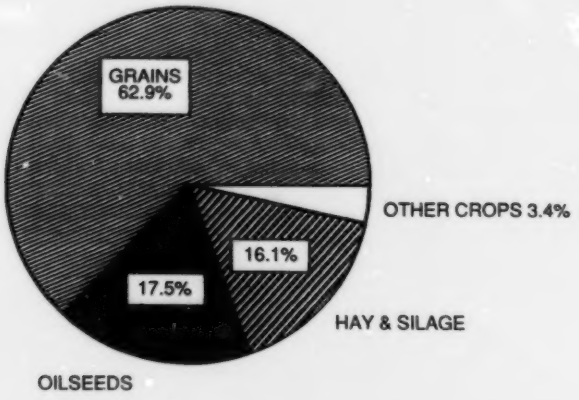
In 1979 Manitoba's **sunflower** acreage peaked at 153 800 hectares. However, in recent years, lower prices and problems due to weather, disease and insects have meant only 73 800 hectares were planted in 1991. 1991 sunflowerseed production was estimated at 124 000 tonnes, only 60 percent of the 1979 production, but up by 23 percent from 1990.

GRAPH 12 **Farm Value of Crop Production, 1971-1991**



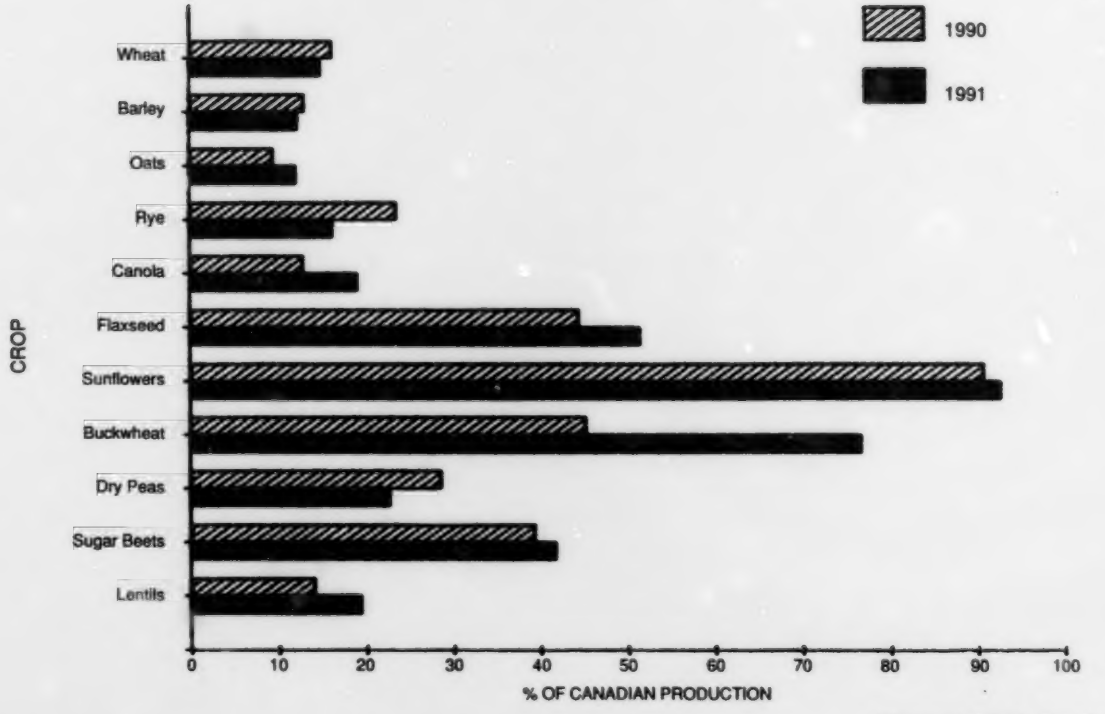
Datasource: Manitoba Agriculture

GRAPH 13 Area of Crops Planted in Manitoba, 1991



Datasource: Statistics Canada

GRAPH 14 Manitoba Crop Production as a Percent of Canadian Production, 1990 and 1991



Datasource: Statistics Canada

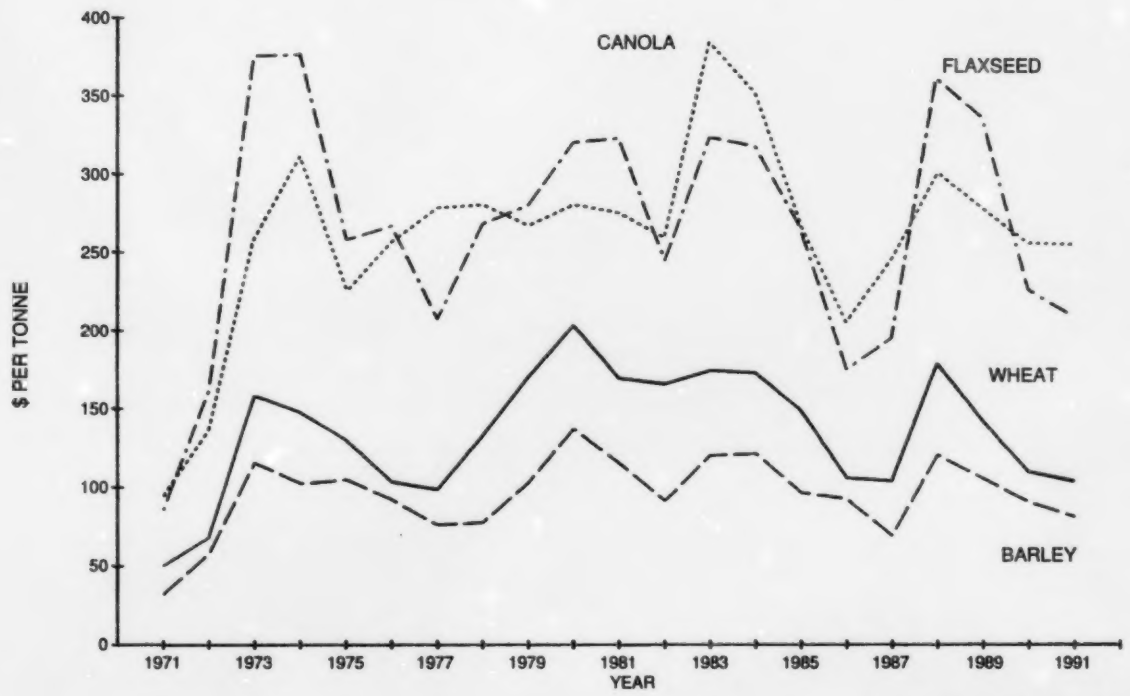
The mix of crops and area seeded each year depends, to a large extent, on anticipated market or Gross Revenue Insurance Plan prices relative to production costs. The area seeded to wheat in the province in 1992 is expected to decline by four percent to 2 092 million hectares. Lower barley prices could encourage an 18 percent decrease in the area of barley to 455 000 hectares in 1992. Plantings of flaxseed are expected to decrease to 150 000 hectares due to anticipated lower prices, but the canola acreage could increase by 24 percent to 627 000 hectares.

Manitoba is not only an important source of grains and oilseeds, but is a major area for the production of **special crops** in Canada. One of two major buckwheat-producing provinces, Manitoba supplied almost 75 percent of the Canadian crop in 1991 with an estimated value of $3.2 million. Manitoba's dry pea production, valued at $14 million, was estimated at 21 percent of the national crop in 1991, while 42 percent of Canada's sugar beets, 19 percent of the lentils and seven percent of the mustard seed were produced in Manitoba. Overall, special crop plantings in 1992 (excluding corn) are expected to be three percent above the 1991 level, mainly due to the large increase in buckwheat and lentil areas more than offsetting smaller areas of mustard seed, dry beans and canary seed. Manitoba's grain corn area is expected to increase by 30 percent to 52 600 hectares in 1992.

Manitoba's vegetable industry, although still relatively small compared to the major producing provinces of Ontario and British Columbia, has grown in importance over the years, particularly in terms of employment and import substitution. Manitoba had about 150 commercial potato producers, 35 major vegetable producers and over 240 market gardeners who employed more than 2,000 full-time and seasonal farm workers in 1991. In 1991, potato and vegetable production was valued at $63 million, up from $59 million in 1990. In addition, the production of fruit, mushrooms, flowers, nursery products and sod in Manitoba amounted to over $25 million in 1991.

GRAPH 15

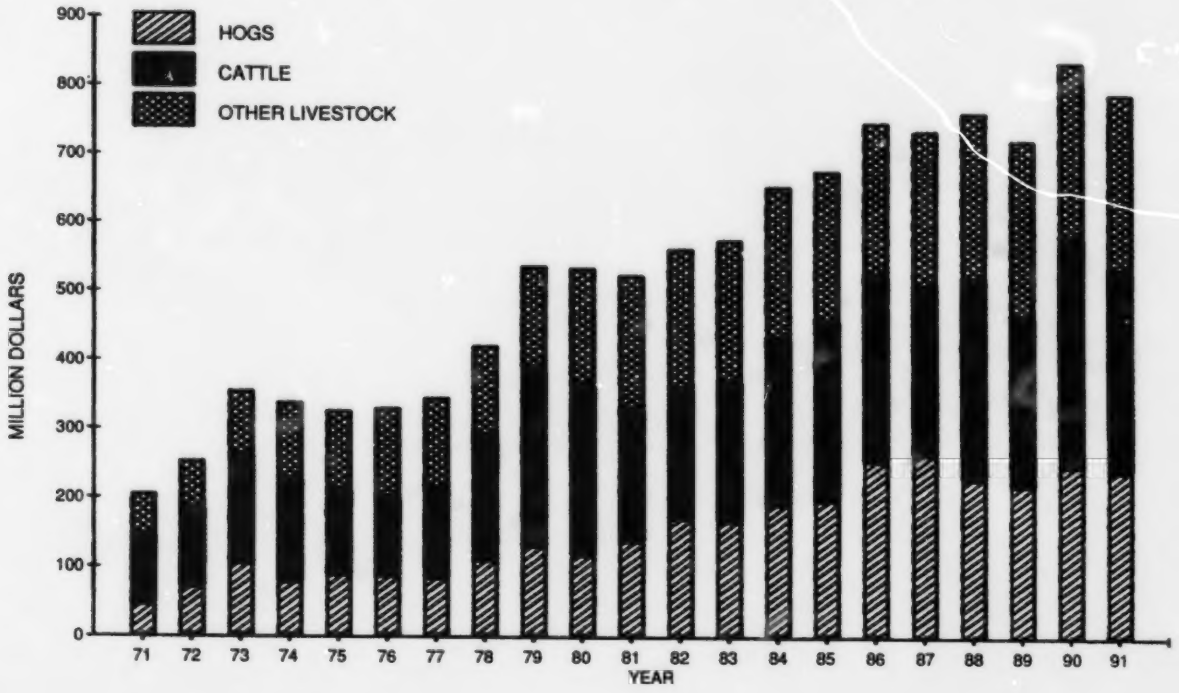
Prices of Selected Crops, 1971-1991



Datasource: Manitoba Agriculture

GRAPH 16

Farm Value of Livestock Production, 1971-1991



Datasource: Manitoba Agriculture

Livestock

The livestock industry in Manitoba contributed 37.7 percent of the total farm cash receipts in 1991, down from 39.3 percent in 1990. Marketings of cattle and calves amounted to over 34 percent of livestock product value and provided 13.0 percent of total 1991 farm cash receipts. This made beef the second largest farm commodity next to wheat.

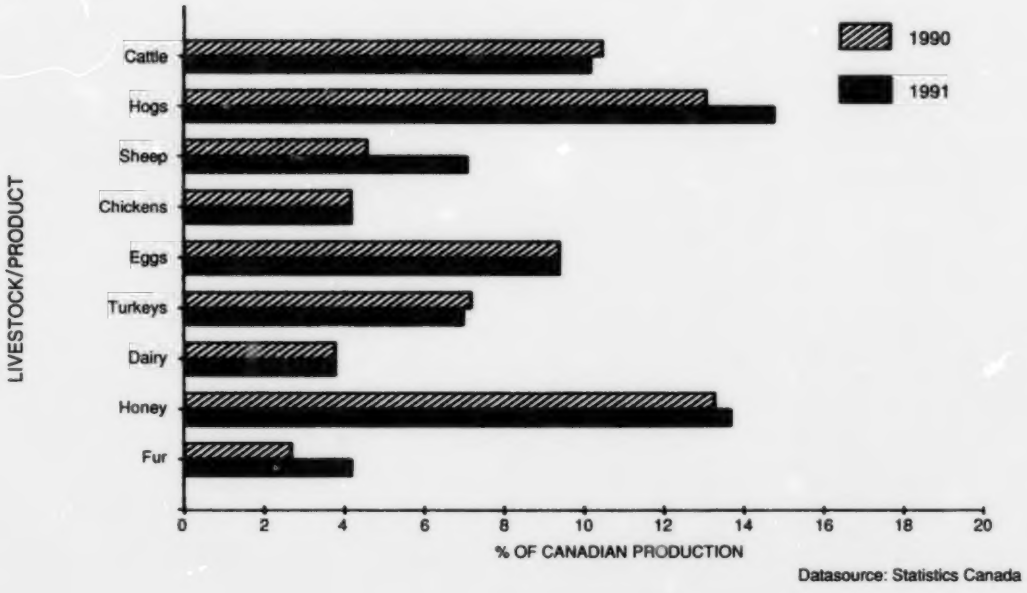
The province has almost nine percent of all cattle and calves in Canada, 11 percent of the beef cows, more than four percent of the dairy cows, almost 13 percent of the hogs, four percent of the sheep and lambs, seven percent of the hens and chickens, 10 percent of the turkeys, 95 percent of the geese, four percent of the ducks and over 11 percent of the egg production. As only four percent of Canada's population lives in Manitoba, the province is a surplus supplier of most livestock products.

Prices for Manitoba's cattle and hogs are dependent on prices in the United States and, to a lesser extent, in eastern Canada. Thus local prices tend to be variable, depending on the supply and demand for red meats particularly in the major markets of the U.S., Ontario and Quebec. This situation, in the past, made management decisions difficult for local producers, who tended to suffer from price and income instability. The national tripartite stabilization plans have been introduced to help limit the effect of price fluctuations.

Declining North American per capita beef consumption (since the peak year of 1976), and variable profitability from beef production resulted in a decline in the Manitoba **cattle** herd from 1977 to 1987. Encouraged by higher calf prices since 1987, the beef cow herd increased slightly in 1988 and by one to two percent in both 1989 and 1990. By 1991, the beef cow herd had increased by five percent to 411,00 head. Marketings of cattle and calves were valued at $253 million in 1991. The total number of cattle slaughtered in Manitoba packing plants peaked at 581,000 head in 1976. Ten years later, slaughterings had declined to 380,900 head. The closing of three major slaughter facilities in 1987 and 1990 further reduced local slaughter capacity by about

GRAPH 17

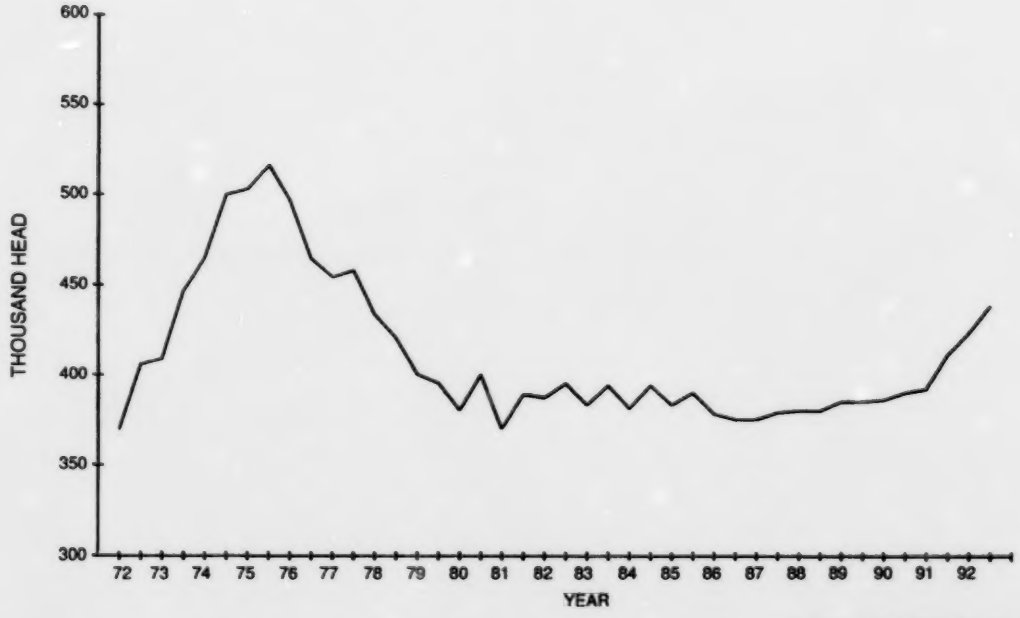
Manitoba Livestock Production as a Percent of Canadian Production 1990 and 1991



Datasource: Statistics Canada

GRAPH 18

Number of Beef Cows in Manitoba January 1 and July 1, 1972-1992



Datasource: Statistics Canada

80 percent. With increased sales of feeder cattle and calves to the United States, Alberta and Saskatchewan, Manitoba inspected slaughter fell by 37 percent to 241,600 head in 1987 and again by 24 percent to 183,300 head in 1988. In 1989 and 1990 only 125,800 and 92,310 cattle respectively were slaughtered in Manitoba. 1991 slaughterings decreased to 55,800 head.

Manitoba **hog** marketings rose to 1,352,000 head in 1971, but decreased to 835,000 head in 1976. Price stabilization plans introduced since 1981 supported the industry during low-price periods. By 1991, Manitoba hog production had reached over 2.1 million head with a value of $240 million. Manitoba's share of the Canadian hog market declined from 13 percent in 1971 to less than nine percent in 1982 as hog production shifted to the central Canadian provinces, particularly Quebec. However, by 1991, Manitoba's share of national hog production was at 14 percent.

The **sheep** industry is much smaller than that of cattle and hogs. The number of sheep on Manitoba farms peaked at 81,300 head in 1981, but had declined to 22,000 head by 1988. Increased interest in sheep production over the next three years raised the provincial flock to 36,900 head in 1991. Only about 25 percent of the lambs produced in Manitoba are slaughtered in federally or provincially inspected packing plants located in the province. A large number of producers sell their product privately to the consumer or through brokers to other provinces and the United States.

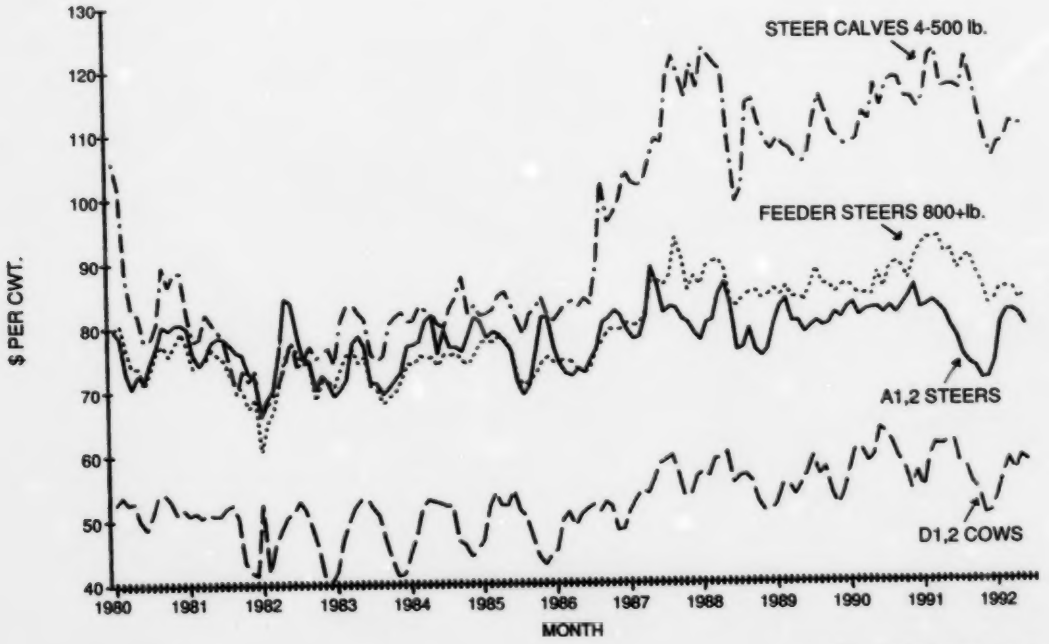
In 1991, Manitoba's 56,000 **dairy** cows produced milk and cream valued at 127.9 million (including supplementary payments). This was a decrease of 0.5 percent from the 1990 level.

Farm receipts for **chickens, turkeys and eggs** produced in the province amounted to $100.6 million in 1991, down by 1.2 percent from the previous year.

Manitoba farmers also produce such diverse commodities as honey, pheasants, fox and mink, wild boars, goats, ostriches, llamas, bison, rabbits and horses for P.M.U. and slaughter. The total value of sales of these products in 1991 was over $40 million.

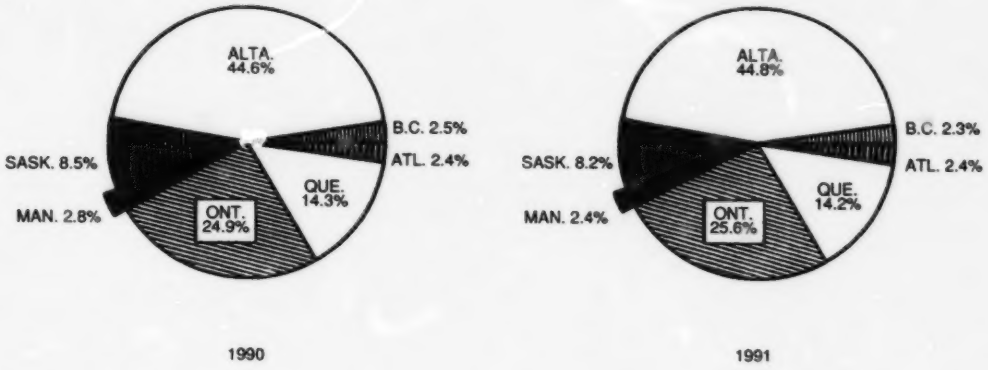
GRAPH 19

Winnipeg Cattle Prices by Month 1980-1992



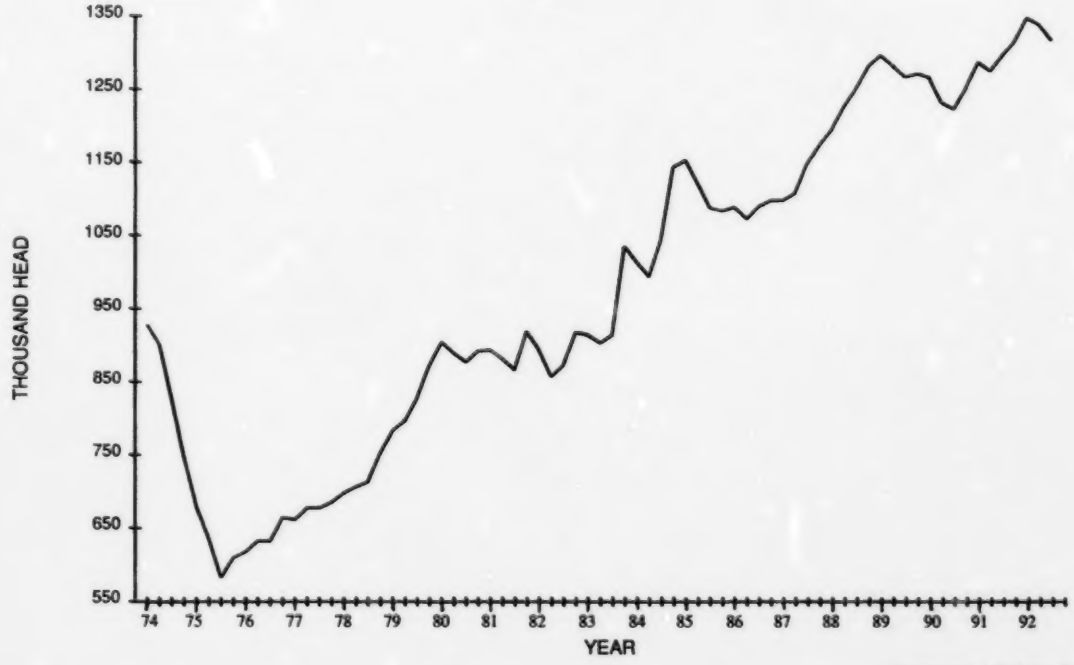
Datasource: Agriculture Canada

GRAPH 20 **Cattle Slaughter by Province of Origin, 1990 and 1991**



Datasource: Agriculture Canada

GRAPH 21 **Manitoba Hogs on Farms by Quarter, 1974-1992**

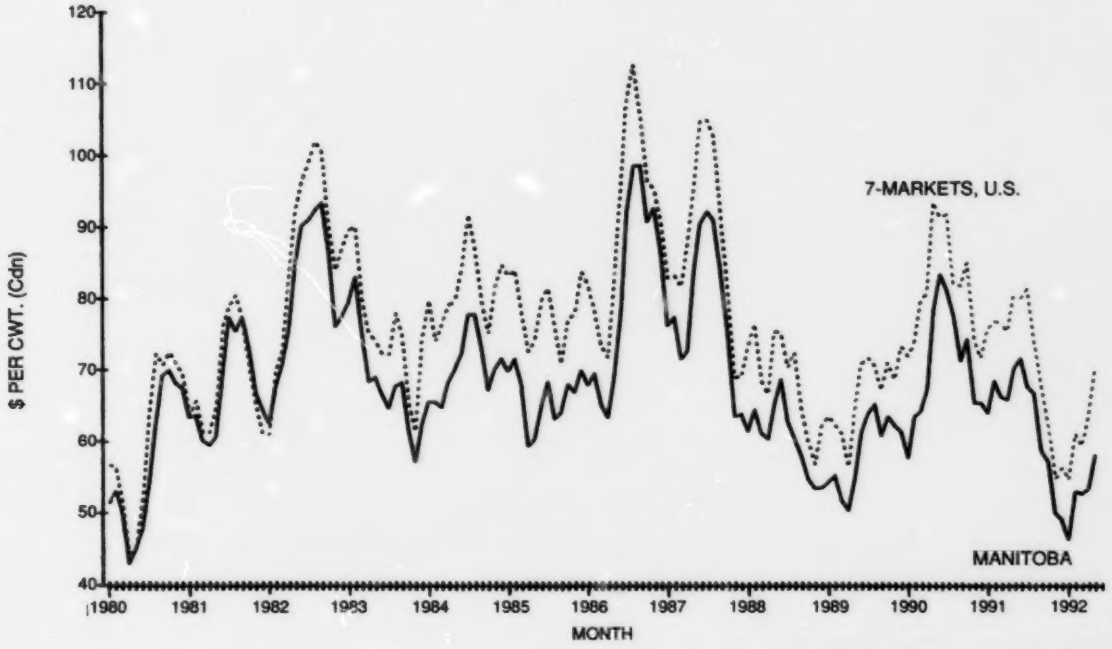


Datasource: Statistics Canada

GRAPH 22

Hog Prices by Month, 1980-1992

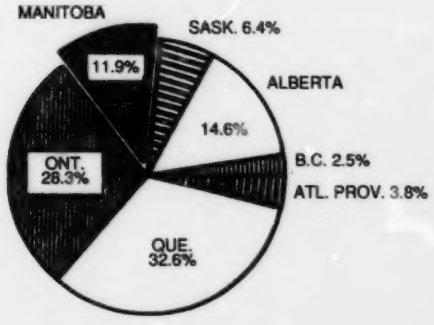
Index 100 dressed weight



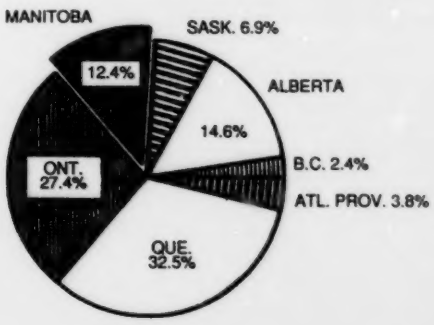
Datasource: Agriculture Canada and U.S.D.A.

GRAPH 23

Hog Slaughter by Province of Origin 1990 and 1991



1990



1991

Datasource: Agriculture Canada

AGRICULTURAL TRADE

Manitoba's agricultural exports are shipped mainly in unprocessed or semi-processed states to other Canadian provinces and over 100 countries. Manitoba uses about 12 percent of the wheat and almost 50 percent of the barley produced in the province, the remainder being exported to eastern Canadian markets or overseas. About 80 percent of Manitoba slaughter cattle and approximately 81 percent of the hogs produced in 1991 were sent out of the province, either live or in a processed state. About 43 percent of the turkey, almost all the chicken and about 35 percent of the eggs produced in Manitoba in 1991 were consumed locally. More than six percent of Manitoba's eggs and egg products were exported to other countries, but most out-of-province shipments went to other Canadian provinces. Almost 90 percent of Manitoba geese were shipped to other provinces, Hong Kong, the United States and Germany.

In 1991, $280.4 million of Manitoba livestock and livestock products were sent out of the country, while $1,023.3 million of processed and unprocessed grains, oilseeds and other crops were exported. Grain exports are one of the largest single sources of foreign exchange earnings for Canada.

Canada imported $117 million worth of cheese, $746 million of fresh vegetables, $292 million of processed vegetables, $498 million of cereal and bakery products, and $940 million of meat and meat products in 1991, much of which could have been produced in Canada and, possibly, Manitoba. However, in many instances, given the lower labour costs and better weather conditions in exporting countries, it may not be economically feasible to reduce imports of some foods, such as fresh vegetables in winter.

FIGURE 1

Manitoba Exports of Agricultural Products and Food, 1991 $1,426.2 Million

Datasource: Statistics Canada

FIGURE 2

Manitoba Exports of Agricultural Products and Food to USA, 1991 $435.3 Million

Datasource: Statistics Canada

IMPACT OF AGRICULTURE ON THE PROVINCIAL ECONOMY

While the relative importance of primary agriculture in the provincial economy has varied significantly over the past ten years, the total economic impact of the agricultural industry has been positive.

CONTRIBUTION OF FOOD PROCESSING

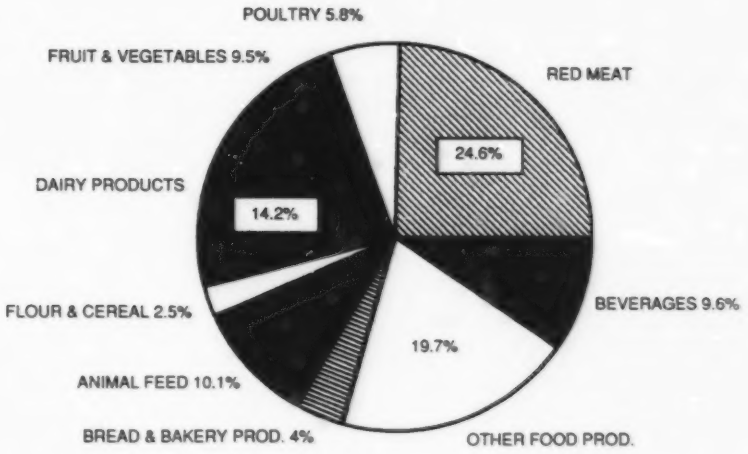
The food and beverage processing industry includes the slaughtering and/or processing of meat and poultry, fruit and vegetables, cereal products, dairy products, vegetable oils, feed, seed, sugar and beverages. It is one of the most important manufacturing industries in Manitoba, producing $1.72 billion of goods and services in 1989, or about 23 percent of the total manufacturing output in the province. In 1989 the food and beverage processing industry employed 7,687 administrative, production and related workers with wages of $221.8 million. Almost $1.24 billion worth of inputs went into the industry in 1989 and generated an added value of $462 million.

The largest sector, meat and poultry slaughtering and processing, employed 2,683 people with wages totalling $73 million in 1989. Principal raw inputs, cattle and hogs, account for about 80 percent of the meat processing industry's total cost of materials and supplies of $428 million. Eighty-seven percent of the hogs and 92 percent of the cattle slaughtered in the province in 1991 originated in Manitoba. Almost 60 percent of the sector's output consists of fresh pork, while other processed meats comprise about 20 percent.

Technological changes in the production of processed meats are mainly responsible for the continuing rationalization of the meat packing industry. A hog slaughtering plant, built in Neepawa, began operations in October, 1986. Canada Packer's closed its slaughter plant in early 1987, which reduced Manitoba's cattle slaughter capacity by about 40 percent. Further reduction in cattle and hog slaughter capacity came in March, 1990 when East-West Packers was forced to close. Burns Meats closed its Brandon cattle slaughter and beef fabrication plant in November 1990. There has been some consolidation of

GRAPH 24

Manitoba Food and Beverage Processing Industry, 1989



Datasource: Statistics Canada

turkey and chicken slaughterings as well as increased productivity in recent years. Manitoba continues to produce deboned turkey meat to supply part of the growing consumer demand for this product, particularly in Japan. Exports of turkey meat to Japan, China, Hong Kong, South Korea, West Indies and England totalled 496 tonnes in 1991.

Other important Manitoba food processing sectors include dairy, bakery, animal feed, beverage and fruit and vegetable processing. The province's feed industry output was $192 million, employing 552 administrative and production staff in 1989. Principal inputs for the industry are barley, wheat, meat meal, corn and canola meal. Much of the corn and canola meal produced in Manitoba is used locally by the feed industry. Soybean meal is imported from the United States.

Nineteen fluid or industrial milk plants employed 860 workers in 1989 and produced milk, cream, ice-cream, butter, cheese and other dairy products valued at $271 million.

Manitoba has two oilseed crushing plants. One is located at Altona, and the other at Harrowby on the Saskatchewan border. Almost all the sunflowerseed and canola crushed at Altona comes from Manitoba. Output from the plants includes bulk crude and refined oil, bulk vegetable oil, retail pack refined oil, hulls and screenings.

Although most of Manitoba's food-quality wheat and other grains is exported, some is processed locally. The province's 61 flour mills and bakeries produced $48 million worth of flour and cereal and $76 million of bread and other bakery products in 1989.

The Manitoba Sugar Company plant employs approximately 250 full- and part-time staff. The plant processes only Manitoba sugar beets, with the entire provincial crop produced under contract to the plant. In 1991, provincial sugar beet production amounted to 453 800 tonnes, an increase of 29 percent from the 1990 crop. The plant's primary product is granulated white sugar, marketed in either liquid or dry form as part of an extensive line of sugar products. In normal years, approximately 50 percent of the product is used directly by consumers, most of whom are in Manitoba. By-products include beet pulp and molasses used for livestock feed and industrial purposes, much of which is exported from the province.

The province's beverage industry employed 841 people and produced beer, wine, soft drinks and spirits valued

at $183 million in 1989. The distillery at Gimli uses about 40-50 000 tonnes (1.8-2.0 million bushels) of grain corn annually. Establishment of the plant at Gimli was based on the availability of high quality and abundant supplies of water and the use of Manitoba-grown grain corn. Between 1980 and 1984, Manitoba farmers supplied the bulk of the high quality corn required by the distillery. In 1985 and 1986 Manitoba grain corn production and quality was poor which resulted in virtually all the corn requirements for the distillery being met by U.S. suppliers. However, more recently, increased producer interest in growing corn resulted in a larger portion of the distillery corn requirements being met by Manitoba supplies.

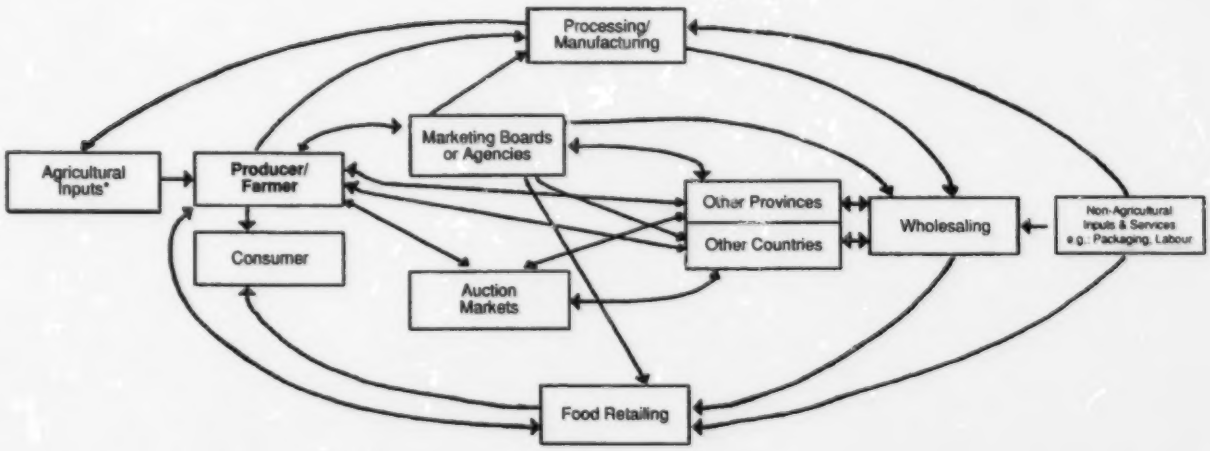
CONTRIBUTION OF AGRICULTURAL INDUSTRIES

In 1989, there were 41 implement manufacturing companies directly associated with agriculture. The companies employed 2,547 workers, paid $69.3 million in wages and salaries and produced $409.3 million worth of equipment. In the manufacture of implements, the companies in turn purchased $200.6 million in inputs and contributed $208.7 million in value added to the final product. The total value of this contribution to the provincial economy is not solely attributable to Manitoba agriculture. However, it nonetheless indicates the significance of this sub-unit to the agricultural sector of Manitoba's economy.

In addition to the 41 companies directly linked to agricultural equipment manufacturing, numerous firms are more indirectly associated with the agriculture equipment industry. These firms produce inputs for agriculture as a secondary output of their operation or as an input into a larger agricultural manufacturing operation. The total value of this contribution to the agriculture sector in 1989 was estimated at $140 million. The associated labour force was estimated at over 1,100.

In Manitoba, 371 licensed dealer establishments were selling farm machinery and associated equipment and providing service facilities in January, 1992. In addition, 145 licensed vendors supplied farm machinery and equipment repair parts to licensed dealers in the province. A number of unlicensed facilities provide repair services for farm equipment. Although statistics are not available on the total value of sales and servicing by this unit, it makes a further significant contribution to the agricultural sector of the economy.

FIGURE 3 **Manitoba Agri-Food System**



* Feed, Chemicals, Machinery, Fuel, Services Utilities, Labour, etc.

Datasource: Manitoba Agriculture

CONTRIBUTION OF SERVICE SECTOR

Manitoba agriculture depends on various service industries. These industries include transportation, construction, finance, insurance and real estate. An estimated six percent of total provincial transportation expenditures involved the movement of agricultural products, raw or processed. About six percent of Manitoba's construction takes place on farms or is for agriculture-related industries. Farm expenditures on financial, insurance or real estate services amounted to approximately 14 percent of total expenditures for these services. In addition, both federal and provincial governments provide farmers with services such as extension, regulatory, research, development, financial and infrastructural. Manitoba farms use about 4.5 percent of the total electric power, 58 percent of the chemicals and 29 percent of total gasoline and fuel oil consumed in the province.

Although some of the food consumed by Manitobans is imported from other provinces or countries, about 50 percent of the food sold by Manitoba's grocery and other food stores is derived from products grown and processed in Manitoba. Thus, a portion of the retail margins from these stores can be included with agriculture's contribution to the provincial economy. In 1991, Manitoba's 1,377 grocery and other food stores had over $1.63 billion in total sales volume, a decrease of eight percent from the previous year. Gross margins and net profits amounted to about 20 percent ($330 million) and 1.2 percent ($20 million) respectively. It is estimated that 50 percent ($165 million) of value added to foods purchased by retailers, is an indirect contribution of Manitoba agriculture to the economy. Food wholesaling activities also contribute to the economy.

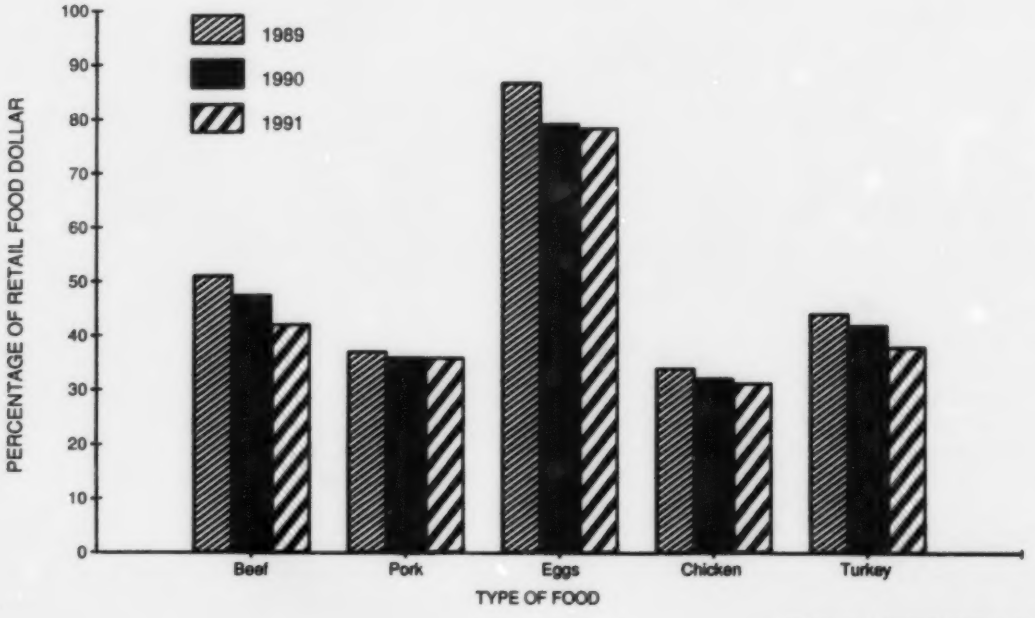
For livestock products such as beef, pork, chicken, turkey and eggs, approximately 30 to 80 percent of the consumers' food dollar goes to the livestock producer, depending on the extent of the processing and merchandising required for each commodity. An egg producer received 79 percent of the retail price of eggs in 1991, while a broiler chicken producer received about 31 percent of the amount a consumer pays for chicken. Processing and merchandising costs and wastage are greater for chicken than for eggs.

TOTAL IMPACT OF AGRICULTURE

One measure of provincial output is the Gross Domestic Product at factor cost, basically an aggregate of net profits and incomes, including wages, depreciation and investment income. Agriculture's direct contribution to the GDP increased to 10.4 percent in 1973, but declined to 7.8 percent in 1976, 7.2 percent in 1981,

GRAPH 25

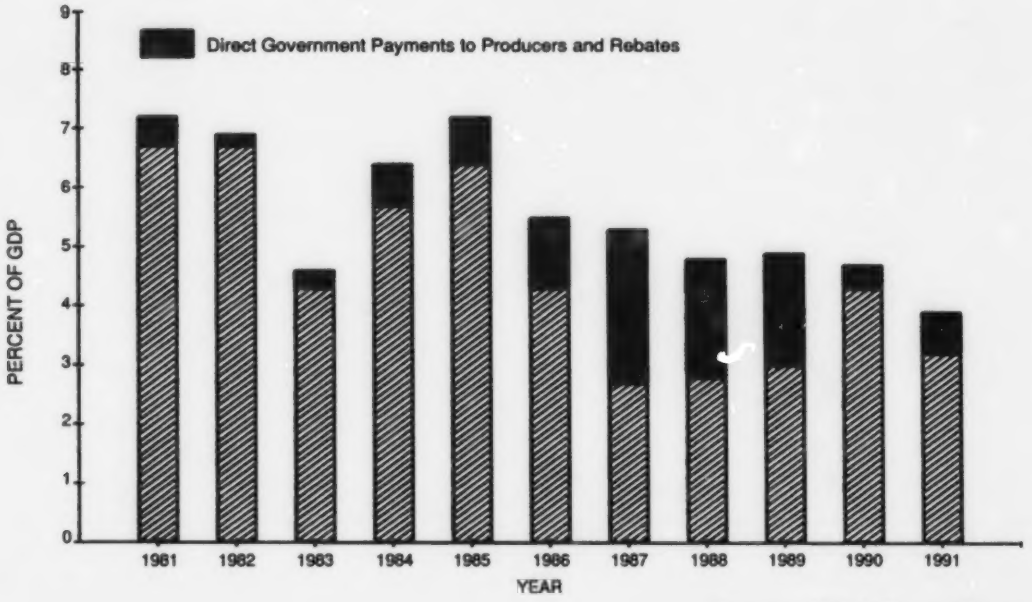
Manitoba Farmers' Share of Retail Price of Food, 1989-1991



Datasource: Agricultural Canada

GRAPH 26

Contribution of Primary Agriculture to Manitoba GDP 1981-1991



Datasource: Manitoba Bureau of Statistics

6.9 percent in 1982 and 4.6 percent in 1983. Net farm income improved and primary agriculture's contribution to the GDP rose to 6.4 percent in 1984 and to 7.2 percent in 1985, but declined to 5.4 percent in 1986. Despite increased government assistance, particularly to grain producers, the contribution to the GDP further declined to 5.3 percent in 1987, 4.8 percent in 1988, 4.9 percent in 1989, 4.7 percent in 1990, and 3.9 percent in 1991. Without government assistance, particularly to offset international grain subsidy wars, the contribution in 1987 and 1988 would have been 2.7 and 2.8 percent respectively, while in 1989, 1990 and 1991 the contribution was 3.0 percent, 4.3 percent and an estimated 3.2 percent.

Agriculture also makes an indirect contribution to the provincial economy through income derived from agriculture-connected industries. These include the food processing industry, industries which supply inputs to agriculture, as well as wholesale, retail and other service sector components which supply services to farmers and agriculture-related workers. When agriculture's indirect contribution to the GDP was added to its direct contribution, an estimated 9.6 percent of Manitoba's GDP was attributed to agriculture in 1991 compared to 11.3 percent in 1990, 11.8 percent in 1989 and 12.5 percent in 1988. For every dollar of net income produced by primary agriculture in Manitoba, $1.70 is generated in the overall Manitoba economy. Agriculture, directly or indirectly, accounted for about one dollar in 10 of production in Manitoba's economy in 1991.

Another method of assessing agriculture's impact on Manitoba's economy is to compare the added value for agricultural inputs to that for the goods producing sector as a whole. In 1991, 16.3 percent of total added value was provided by agriculture compared with 18.1 percent a year earlier.

In 1991, 41,000 persons were directly employed in Manitoba agriculture. In addition, about 22,700 persons were employed in other areas of the provincial economy as a direct result of the agricultural industry, bringing total employment generated by agriculture to 12.9 percent of Manitoba's labour force in 1991. This means that about one job in eight was the result of agricultural production. For every two jobs created on farms in 1991, almost one job would be created in other areas of the Manitoba economy. In addition to stimulating employment locally, agriculture in Manitoba is directly responsible for thousands of jobs in other parts of Canada.